

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S24	4	S23 not S22	US-PGPUB; USPAT	OR	ON	2006/05/04 12:40
S26	4	S25 not S22	US-PGPUB; USPAT	OR	ON	2006/05/04 12:41
S25	8	((five or fifth) adj (insulating or insulator or insulation or dielectric)) same (mim or metal\$1insulating or metal\$1insulator or (metal adj (insulating or insulator or insulation)) or metal\$1insulation ) )	US-PGPUB; USPAT	OR	ON	2006/05/04 14:25
S37	2	S36 not S35	US-PGPUB; USPAT	OR	ON	2006/05/04 15:20
S39	41	S38 and (dram or (dynamic adj (ram or random)) )	US-PGPUB; USPAT	OR	ON	2006/05/04 15:26
S23	4	((many) adj (insulating or insulator or insulation or dielectric)) same (mim or metal\$1insulating or metal\$1insulator or (metal adj (insulating or insulator or insulation)) or metal\$1insulation ) )	US-PGPUB; USPAT	OR	ON	2006/05/04 15:27
S35	6	S34 and (mim or metal\$1insulating or metal\$1insulator or (metal adj (insulating or insulator or insulation)) or metal\$1insulation )	US-PGPUB; USPAT	OR	ON	2006/05/04 15:28
S40	2	(composite with ild) and (mim or metal\$1insulating or metal\$1insulator or (metal adj (insulating or insulator or insulation)) or metal\$1insulation )	US-PGPUB; USPAT	OR	ON	2006/05/04 15:28
S42	20	((six or sixth) adj (insulating or insulator or insulation or dielectric)) and S41	US-PGPUB; USPAT	OR	ON	2006/05/04 15:29
S22	6	((six or sixth) adj (insulating or insulator or insulation or dielectric)) same (mim or metal\$1insulating or metal\$1insulator or (metal adj (insulating or insulator or insulation)) or metal\$1insulation ) )	US-PGPUB; USPAT	OR	ON	2006/05/04 15:29
S44	14	S42 not S43	US-PGPUB; USPAT	OR	ON	2006/05/04 15:30
S48	26	damascene and (tu.in.)	US-PGPUB; USPAT	OR	ON	2006/05/04 15:59
S51	14	S49 or S50	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/04 16:05
S54	14	S51 and capacitor	US-PGPUB; USPAT	OR	ON	2006/05/04 16:07
S52	1	S51 and (mim or metal\$1insulating or metal\$1insulator or (metal adj (insulating or insulator or insulation)) or metal\$1insulation ) and (("257"/\$3.cor.) or ("438"/\$3.cor.))	US-PGPUB; USPAT	OR	ON	2006/05/04 16:07
S58	25	S57 and (mim or metal\$1insulating or metal\$1insulator or (metal adj (insulating or insulator or insulation)) or metal\$1insulation )	US-PGPUB; USPAT	OR	ON	2006/05/08 15:01
S43	6	((six or sixth) adj (insulating or insulator or insulation or dielectric)) same (mim or metal\$1insulating or metal\$1insulator or (metal adj (insulating or insulator or insulation)) or metal\$1insulation ) )	US-PGPUB; USPAT	OR	ON	2006/05/08 15:01
S60	1	((six or sixth) adj (insulating or insulator or insulation or dielectric)) and S59	US-PGPUB; USPAT	OR	ON	2006/05/08 15:05
S62	34	S61 not S59	US-PGPUB; USPAT	OR	ON	2006/05/08 15:07

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S64	40	S63 not (S61 or S59)	US-PGPUB; USPAT	OR	ON	2006/05/08 15:11
S61	35	((six or sixth) adj (insulating or insulator or insulation or dielectric)) and 257/296.ccls.	US-PGPUB; USPAT	OR	ON	2006/05/08 15:11
S65	0	((multiple) adj (ild)) and 257/296.ccls.	US-PGPUB; USPAT	OR	ON	2006/05/08 15:15
S66	11	((multiple) adj (ild))	US-PGPUB; USPAT	OR	ON	2006/05/08 16:19
S70	4	S69 not S68	US-PGPUB; USPAT	OR	ON	2006/05/08 16:21
S68	5	S67 and (mim or metal\$1insulating or metal\$1insulator or (metal adj (insulating or insulator or insulation)) or metal\$1insulation )	US-PGPUB; USPAT	OR	ON	2006/05/08 16:34
S77	23	tu.in. and (mim or metal\$1insulating or metal\$1insulator or (metal adj (insulating or insulator or insulation)) or metal\$1insulation )	US-PGPUB; USPAT	OR	ON	2006/05/08 16:35
S78	17	S77 and capacitor	US-PGPUB; USPAT	OR	ON	2006/05/08 16:35
S69	5	S67 and (damascene)	US-PGPUB; USPAT	OR	ON	2006/05/08 16:53
S86	8	((multiple or multi) adj (level or layer) ) with damascene with capacitor)	US-PGPUB; USPAT	OR	ON	2006/05/10 18:17
S91	16	S90 and capacitor	US-PGPUB; USPAT	OR	ON	2006/05/10 18:21
S89	17	S88 and (trench or groove)	US-PGPUB; USPAT	OR	ON	2006/05/10 18:24
S93	5	((multiple or multi) adj (level or layer) ) with (mim or metal\$1insulating or metal\$1insulator or (metal adj (insulating or insulator or insulation)) or metal\$1insulation ) with capacitor)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/10 18:24
S85	7	deep with damascene with capacitor	US-PGPUB; USPAT	OR	ON	2006/05/10 18:29
S97	5	S96 not S95	US-PGPUB; USPAT	OR	ON	2006/05/10 18:34
S96	26	S94 and ( damascene) with capacitor)	US-PGPUB; USPAT	OR	ON	2006/05/10 19:00
S95	44	S94 and ( (mim or metal\$1insulating or metal\$1insulator or (metal adj (insulating or insulator or insulation)) or metal\$1insulation ) with capacitor)	US-PGPUB; USPAT	OR	ON	2006/05/10 19:03
S10 3	1	((several) adj (interlayer or (inter adj layer) or inter\$1layer or ild)) with capacitor)	US-PGPUB; USPAT	OR	ON	2006/05/11 12:05
S10 5	0	((several) adj (interlayer or (inter adj layer) or inter\$1layer or ild)) with (etch or etched or etching)) and S104	US-PGPUB; USPAT	OR	ON	2006/05/11 12:06
S10 6	0	((multi or multiple) adj (interlayer or (inter adj layer) or inter\$1layer or ild)) with (etch or etched or etching)) and S104	US-PGPUB; USPAT	OR	ON	2006/05/11 12:06
S11 1	0	S110 and (S104 or S107)	US-PGPUB; USPAT	OR	ON	2006/05/11 12:07
S10 2	0	S101 and ( (mim or metal\$1insulating or metal\$1insulator or (metal adj (insulating or insulator or insulation)) or metal\$1insulation or damascene ) with capacitor)	US-PGPUB; USPAT	OR	ON	2006/05/11 12:07
S11 8	0	((several) adj (interlayer or (inter adj layer) or inter\$1layer or ild)) with (etch or etched or etching)) and S115	US-PGPUB; USPAT	OR	ON	2006/05/11 12:13

## EAST S arch History

S109	0	(((several) adj (interlayer or (inter adj layer) or inter\$1layer or ild)) with (etch or etched or etching)) and S107	US-PGPUB; USPAT	OR	ON	2006/05/11 12:13
S119	0	(((multi or multiple) adj (interlayer or (inter adj layer) or inter\$1layer or ild)) with (etch or etched or etching)) and S115	US-PGPUB; USPAT	OR	ON	2006/05/11 12:14
S108	0	(((multi or multiple) adj (interlayer or (inter adj layer) or inter\$1layer or ild)) with (etch or etched or etching)) and S107	US-PGPUB; USPAT	OR	ON	2006/05/11 12:14
S53	1	S51 and (mim or metal\$1insulating or metal\$1insulator or (metal adj (insulating or insulator or insulation)) or metal\$1insulation )	US-PGPUB; USPAT	OR	ON	2006/05/11 12:17
S123	12	S122 and (mim or metal\$1insulating or metal\$1insulator or (metal adj (insulating or insulator or insulation)) or metal\$1insulation or damascene )	US-PGPUB; USPAT	OR	ON	2006/05/11 15:12
S148	30	S147 not S146	US-PGPUB; USPAT	OR	ON	2006/05/19 12:59
S146	40	( diffusion with (barrier adj layer) with polysilicon with hole)	US-PGPUB; USPAT	OR	ON	2006/05/19 12:59
S154	12	( diffusion with (barrier) with polysilicon with (tungsten adj plug))	US-PGPUB; USPAT	OR	ON	2006/05/19 13:23
S156	7	S155 not capacitor	US-PGPUB; USPAT	OR	ON	2006/05/19 13:24
S159	8	S158 not S156	US-PGPUB; USPAT	OR	ON	2006/05/19 13:25
S158	10	S157 not capacitor	US-PGPUB; USPAT	OR	ON	2006/05/19 13:25
S163	31	S162 and damascene	US-PGPUB; USPAT	OR	ON	2006/05/19 18:03
S157	42	( diffusion with (barrier) with (polysilicon adj contact))	US-PGPUB; USPAT	OR	ON	2006/05/19 18:03
S167	16	S166 not capacitor	US-PGPUB; USPAT	OR	ON	2006/05/19 18:44
S177	21	S176 and (mim adj capacitor)	US-PGPUB; USPAT	OR	ON	2006/05/19 19:28
S196	22	( diffusion with (ferroelectric) with (barrier near3 ((upper or top) adj electrode) ))	US-PGPUB; USPAT	OR	ON	2006/05/19 20:03
S195	1	( diffusion with (ferroelectric) with (barrier near ((upper or top) adj electrode) ))	US-PGPUB; USPAT	OR	ON	2006/05/19 20:03
S200	37	(( composite adj electrode) with barrier not schottky)	US-PGPUB; USPAT	OR	ON	2006/05/19 20:06
S199	6	( composite adj (upper or top) adj electrode)	US-PGPUB; USPAT	OR	ON	2006/05/19 20:06
S202	1	( diffusion with (ferroelectric) with (diffusion near ((upper or top) adj electrode) ))	US-PGPUB; USPAT	OR	ON	2006/05/19 20:14
S197	22	( diffusion with (ferroelectric) with (barrier near3 ((upper or top) adj electrode) ))	US-PGPUB; USPAT	OR	ON	2006/05/19 20:14
S203	1	(( ferroelectric) with (diffusion near ((upper or top) adj electrode) ))	US-PGPUB; USPAT	OR	ON	2006/05/19 20:14
S204	28	(( capacitor) with (diffusion near ((upper or top) adj electrode) ))	US-PGPUB; USPAT	OR	ON	2006/05/19 20:35
S206	3	(( barrier adj over adj ((upper or top) adj electrode) ))	US-PGPUB; USPAT	OR	ON	2006/05/19 20:35

## EAST Search History

S20 5	24	S204 and (("257"/\$3.cor.) or ("438"/\$3.cor.))	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/19 20:36
S20 1	1	S200 and ferroelectric	US-PGPUB; USPAT	OR	ON	2006/05/19 20:36
S19 8	19	S197 and (@ad<"20031022" or @rlad<"20031022")	US-PGPUB; USPAT	OR	ON	2006/05/19 20:36
S21 2	0	(( barrier adj layer adj over adj (high adj (k or dielectric or permittivity)) ) with high not gate)	US-PGPUB; USPAT	OR	ON	2006/05/19 20:37
S21 3	4	(( barrier adj layer adj over adj (high adj (k or dielectric or permittivity)) ) )	US-PGPUB; USPAT	OR	ON	2006/05/19 21:19
S22 2	7	( ( barrier near3 ((upper or top) adj electrode)) with (high adj (k or dielectric or permittivity)) not gate )	US-PGPUB; USPAT	OR	ON	2006/05/19 21:33
S22 3	0	( barrier with ((upper or top) adj electrode) with (high adj (k or dielectric or permittivity)) not (bottom or lower or gate) )	US-PGPUB; USPAT	OR	ON	2006/05/19 21:35
S22 9	5	S228 and (@ad<"20031022" or @rlad<"20031022") and (("257"/\$3.cor.) or ("438"/\$3.cor.))	US-PGPUB; USPAT	OR	ON	2006/05/19 21:59
S22 8	29	(( ((upper or top) adj electrode) adj stack ) with barrier)	US-PGPUB; USPAT	OR	ON	2006/05/19 22:00
S23 0	1	( (composite adj (upper or top) adj electrode) with barrier)	US-PGPUB; USPAT	OR	ON	2006/05/19 22:00
S22 4	0	( barrier with ((upper or top) adj electrode) with (ferroelectric) not (bottom or lower or gate) )	US-PGPUB; USPAT	OR	ON	2006/05/19 22:04
S23 2	25	( barrier with ((upper or top) adj electrode) with (barrier) not (bottom or lower or gate) )	US-PGPUB; USPAT	OR	ON	2006/05/19 22:06
S23 3	11	S232 and (@ad<"20031022" or @rlad<"20031022") and (("257"/\$3.cor.) or ("438"/\$3.cor.))	US-PGPUB; USPAT	OR	ON	2006/05/19 22:07
S23 4	0	( barrier with ((upper or top) adj electrode) with nitride not (bottom or lower or gate) )	US-PGPUB; USPAT	OR	ON	2006/05/19 22:07